

=> b reg  
FILE 'REGISTRY' ENTERED AT 18:23:46 ON 11 FEB 2008  
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STRUCTURE FILE UPDATES: 10 FEB 2008 HIGHEST RN 1002565-97-0  
DICTIONARY FILE UPDATES: 10 FEB 2008 HIGHEST RN 1002565-97-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

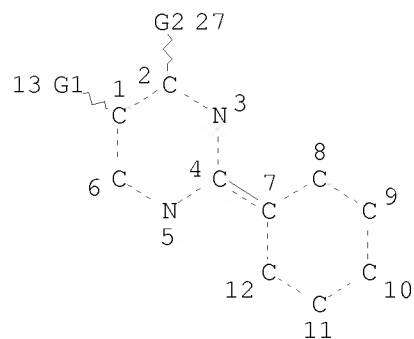
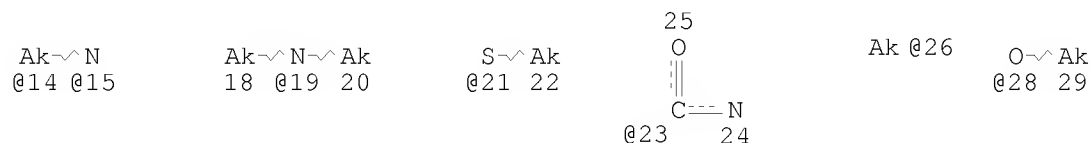
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d que sta l15  
L13 STR



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VAR G2=H/CN/NO2/AK/21/23/28  
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GGCAT IS UNS AT 26  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RSPEC 4  
NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE  
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SEARCH TIME: 00.00.02

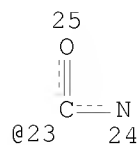
2850 ANSWERS

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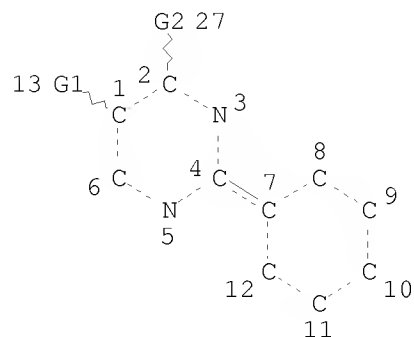
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Ak~N~Ak  
18 @19 20

S~Ak  
@21 22



Ak @26 O~Ak  
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VAR G1=26/14/15/19/21/23  
VAR G2=H/CN/NO2/AK/21/23/28  
NODE ATTRIBUTES:  
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GGCAT IS UNS AT 26  
DEFAULT ECLEVEL IS LIMITED

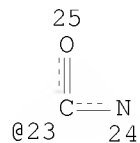
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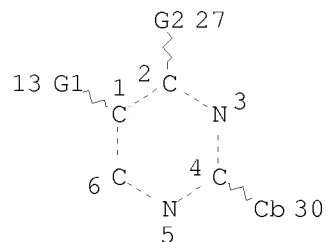
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Ak @26 O~Ak  
@28 29



VAR G1=26/14/15/19/21/23

VAR G2=H/CN/NO2/AK/21/23/28

NODE ATTRIBUTES:

CONNECT IS M2 RC AT 30

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 26

GGCAT IS UNS AT 30

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 4

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L21 1632 SEA FILE=REGISTRY SUB=L15 SSS FUL L19

100.0% PROCESSED 2850 ITERATIONS

1632 ANSWERS

SEARCH TIME: 00.00.01

=> b hcap

FILE 'HCAPLUS' ENTERED AT 18:23:58 ON 11 FEB 2008

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FILE COVERS 1907 - 11 Feb 2008 VOL 148 ISS 7

FILE LAST UPDATED: 10 Feb 2008 (20080210/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitstr l29 tot

L29 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2000:368312 HCAPLUS

DN 133:4671

TI Preparation of pyrimidinyl naphthalene derivatives as antithrombotics

IN Ashizawa, Hiroshi; Uchiyama, Hiroyuki; Midorikawa, Atsushi; Kawamura, Hiroyuki

PA Torii Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 105 pp.

CODEN: PIXXD2

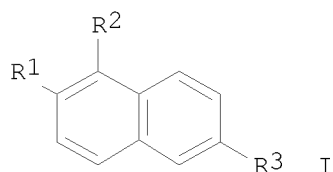
DT Patent

LA Japanese

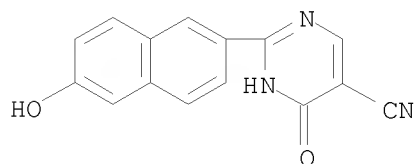
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO2000031045	A1	20000602	1999WO-JP02938	19990602 <--

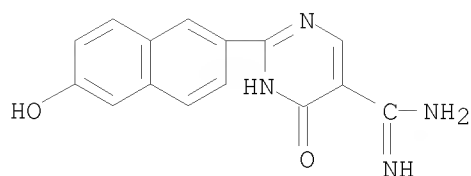
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DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
AU---9940583 A1 20000613 1999AU-0040583 19990602 <--  
WO2001077082 A1 20011018 2000WO-JP02278 20000407 <--  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,  
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV,  
MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW,  
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
PRAI 1998JP-0331746 A 19981120 <--  
1999WO-JP02938 W 19990602 <--  
OS MARPAT 133:4671  
GI



AB The title compds. I [R1 = H, OH, etc.; R2 = H, halo, etc.; R3 =  
pyrimidinyl (generic structures given), etc.] are prepared The survival  
rate of mice dosed with 6-(4-hydroxy-6-methyl-2-pyrimidinyl)-2-  
naphthyloxyacetic acid at 1 mg/kg orally in the thrombin-induced  
thrombosis model was 70%, vs. 20% survival rate in controls. Formulations  
are given.  
IT 270255-01-1P 270255-02-2P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of pyrimidinynaphthalene derivs. as antithrombotics)  
RN 270255-01-1 HCAPLUS  
CN 5-Pyrimidinecarbonitrile, 1,4-dihydro-2-(6-hydroxy-2-naphthalenyl)-4-oxo-  
(9CI) (CA INDEX NAME)

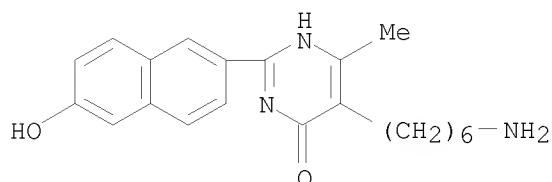


RN 270255-02-2 HCAPLUS  
CN 5-Pyrimidinecarboximidamide, 1,4-dihydro-2-(6-hydroxy-2-naphthalenyl)-4-  
oxo-, monohydrochloride (9CI) (CA INDEX NAME)

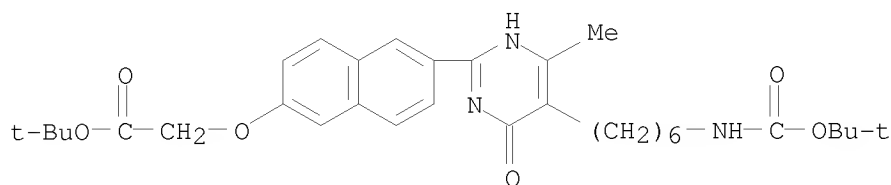


● HCl

IT 270255-30-6P 270255-31-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of pyrimidinynaphthalene derivs. as antithrombotics)  
 RN 270255-30-6 HCAPLUS  
 CN 4(1H)-Pyrimidinone, 5-(6-aminohexyl)-2-(6-hydroxy-2-naphthalenyl)-6-methyl- (9CI) (CA INDEX NAME)



RN 270255-31-7 HCAPLUS  
 CN Acetic acid, [[6-[5-[6-[[[(1,1-dimethylethoxy)carbonyl]amino]hexyl]-1,4-dihydro-6-methyl-4-oxo-2-pyrimidinyl]-2-naphthalenyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



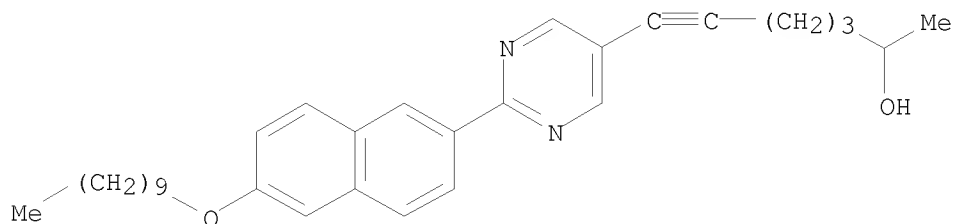
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1996:56085 HCAPLUS  
 DN 124:87031  
 TI Preparation of optically active hydroxyalkyne moiety-containing pyrimidines and analogs as intermediates for pharmaceuticals, agrochemicals, and liquid crystals  
 IN Azumai, Takayuki; Fujimoto, Yukari; Matsumoto, Tsutomu; Minamii, Masayoshi  
 PA Sumitomo Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 24 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

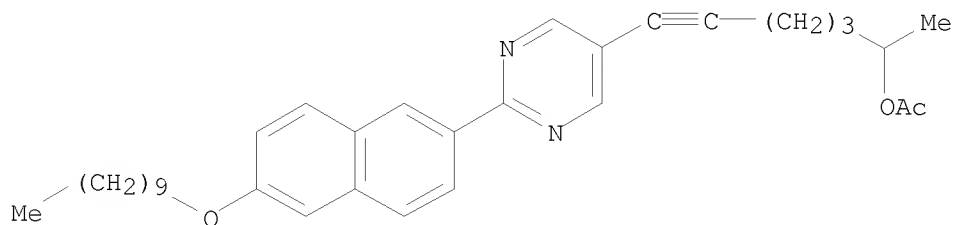
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PI	JP--07233109	A	19950905	1994JP-0026533	19940224 <--
PRAI	1994JP-0026533		19940224	<--	
OS	CASREACT 124:87031; MARPAT 124:87031				
AB	The title compds. R1(O)mA1A2(A3)qC.tplbond.C(CH2)nCHMeOR [R1 = alkyl, etc.; R = H, COR2; R2 = alkyl; m, q = 0 or 1; n = 0 - 8; A1 - A3 = Ph, pyrimidine, etc.] are claimed. Thus, a mixture of 2-(4'-(6-acetoxy-1-heptynyl)-4-biphenyl)-5-octyloxypyrimidine 2.6 g in 0.3 M phosphate buffer (pH 7) 80 mL, CHCl3 3 mL, and lipase P Amano 0.8 g was stirred at 30 - 35° for 60 h. After workup, purification of the product by silica gel column chromatog. gave (-)-2-(4'-(6-hydroxy-1-heptynyl)-4-biphenyl)-5-octyloxypyrimidine 0.9 g and (-)-2-(4'-(6-acetoxy-1-heptynyl)-4-biphenyl)-5-octyloxypyrimidine 1.5 g.				
IT	172736-03-7P 172736-04-8P RL: BPN (Biosynthetic preparation); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation) (optically active; preparation of optically active hydroxyalkyne moiety-containing pyrimidines and analogs as intermediates for pharmaceuticals, agrochems., and liquid crystals)				
RN	172736-03-7 HCAPLUS				
CN	6-Heptyn-2-ol, 7-[2-[6-(decyloxy)-2-naphthalenyl]-5-pyrimidinyl]-, (-)-(CA INDEX NAME)				

Rotation (-).



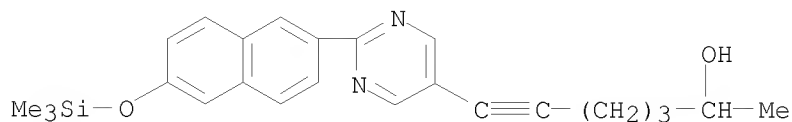
RN 172736-04-8 HCAPLUS  
CN 6-Heptyn-2-ol, 7-[2-[6-(decyloxy)-2-naphthalenyl]-5-pyrimidinyl]-, acetate (ester), (-)-(9CI) (CA INDEX NAME)

Rotation (-).



IT 172736-79-7P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of optically active hydroxyalkyne moiety-containing pyrimidines and analogs as intermediates for pharmaceuticals, agrochems., and liquid crystals)  
RN 172736-79-7 HCAPLUS  
CN 6-Heptyn-2-ol, 7-[2-[6-[(trimethylsilyl)oxy]-2-naphthalenyl]-5-

pyrimidinyl]- (CA INDEX NAME)



L29 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN  
AN 1995:969456 HCAPLUS  
DN 124:8841  
TI Preparation of pyrimidine derivatives as intermediates for  
pharmaceuticals, agrochemicals, and liquid crystals  
IN Azumai, Takayuki; Fujimoto, Yukari; Matsumoto, Tsutomu; Minamii, Masayoshi  
PA Sumitomo Chemical Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 16 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP--07206715	A	19950808	1994JP-0005476	19940121 <--
PRAI	1994JP-0005476		19940121	<--	

OS CASREACT 124:8841; MARPAT 124:8841

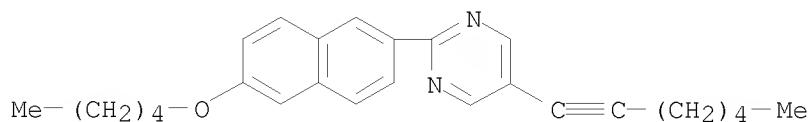
AB The title compds. R1(O)mA1(A2)pA3(O)k(CH2)n+2(CHCZ3)r(O)s(CO)tR2 [R1 = alkyl, etc.; A1, A2, A3 = Ph, pyridyl, etc.; m, p = 0 or 1; n = 0 - 10; r, s, t = 0 or 1; Z = F, H; k = 0 or 1] are prepared via reaction of phenylhaloheterocycles with alkynes, followed by hydrogenation. Thus, reaction of 2-(4-decyloxyphenyl)-5-bromopyrimidine with 4-pentyn-2-ol in triethylamine containing copper iodide, triphenylphosphine, and bis(triphenylphosphine)palladium(II) chloride gave a product which was hydrogenated under hydrogen over 5% Pd on carbon to give 5-(4-hydroxy-1-pentyl)-2-(4-decyloxyphenyl)pyrimidine.

IT 171183-09-8P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of pyrimidine derivs. as intermediates for pharmaceuticals, agrochems., and liquid crystals)

RN 171183-09-8 HCAPLUS

CN Pyrimidine, 5-(1-heptynyl)-2-[6-(pentyloxy)-2-naphthalenyl]- (9CI) (CA INDEX NAME)



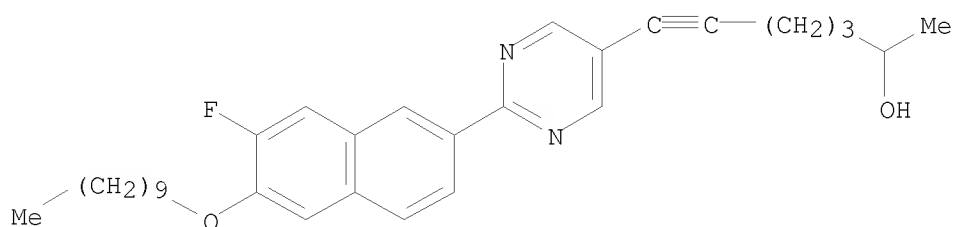
L29 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN  
AN 1995:967137 HCAPLUS  
DN 124:29778  
TI Preparation of optically active alcohol derivatives  
IN Azumai, Takayuki; Fujimoto, Yukari; Matsumoto, Tsutomu; Minamii, Masayoshi  
PA Sumitomo Chemical Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 22 pp.  
CODEN: JKXXAF  
DT Patent

LA Japanese

FAN.CNT 1

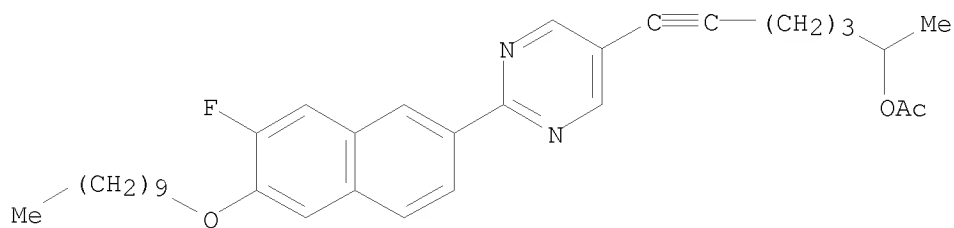
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PI	JP--07179380	A	19950718	1993JP-0325329	19931222 <--
PRAI	1993JP-0325329		19931222 <--		
OS	CASREACT 124:29778; MARPAT 124:29778				
AB	The title compds. R1(O)mA1(A2)p(A3)qC.tplbond.C(CH2)nC*HMeOH (I) [R1 = saturated or unsatd. alkyl, etc.; m, p, q = 0 or 1; n = 0 - 8; A1 - A3 = Q, etc.; provisos are given; * indicates asym. carbon] are claimed. I are useful as intermediates for pharmaceuticals, liquid crystals, etc. Treatment of 2-(2,3-difluoro-4-octyloxyphenyl)-5-(6-acetoxy-1-heptynyl)pyrimidine with lipase in phosphate buffer and dichloromethane gave, after workup and column chromatog., 46% (-)-2-(2,3-difluoro-4-octyloxyphenyl)-5-(6-hydroxy-1-heptynyl)pyrimidine and 53% (-)-2-(2,3-difluoro-4-octyloxyphenyl)-5-(6-acetoxy-1-heptynyl)pyrimidine.				
IT	171099-85-7P 171099-86-8P				
	RL: BPN (Biosynthetic preparation); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation)				
	(preparation of optically active alc. derivs.)				
RN	171099-85-7 HCAPLUS				
CN	6-Heptyn-2-ol, 7-[2-[6-(decyloxy)-7-fluoro-2-naphthalenyl]-5-pyrimidinyl]-, (-)- (CA INDEX NAME)				

Rotation (-).



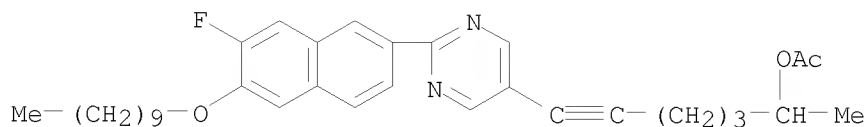
RN 171099-86-8 HCAPLUS  
CN 6-Heptyn-2-ol, 7-[2-[6-(decyloxy)-7-fluoro-2-naphthalenyl]-5-pyrimidinyl]-, acetate (ester), (-)- (9CI) (CA INDEX NAME)

Rotation (-).



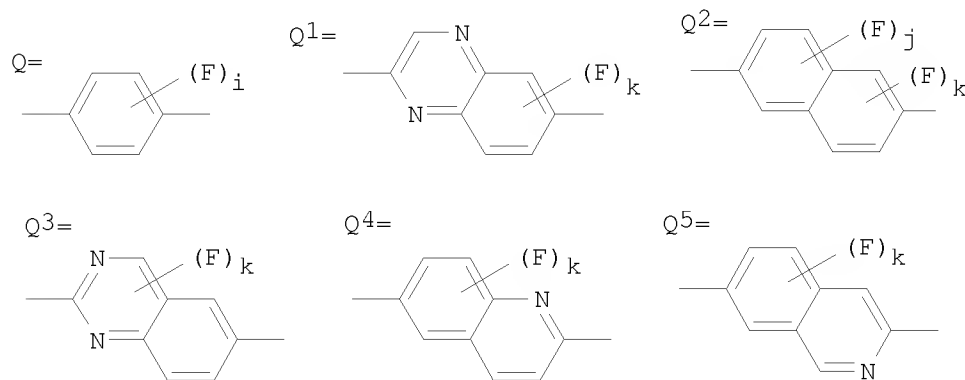
IT 171100-25-7P  
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of optically active alc. derivs.)  
RN 171100-25-7 HCAPLUS  
CN 6-Heptyn-2-ol, 7-[2-[6-(decyloxy)-7-fluoro-2-naphthalenyl]-5-pyrimidinyl]-, acetate (ester) (9CI) (CA INDEX NAME)





L29 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1995:909374 HCAPLUS  
 DN 123:314002  
 TI Method for producing phenol, heterocyclylphenol, and heterocycle-condensed phenol derivatives, and related compounds  
 IN Fujimoto, Yukari; Takano, Naoyuki; Azumai, Takayuki; Minamii, Masayoshi  
 PA Sumitomo Chemical Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 40 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP--07118241	A	19950509	1994JP-0205178	19940830 <--
PRAI	1994JP-0205178	A	19940830	<--	
	1993JP-0217792		19930901	<--	
OS	CASREACT 123:314002; MARPAT 123:314002				
GI					



AB The title compds., particularly optically active compds., [I; R1 = H, (un)saturated C1-20 alkyl, (un)saturated C2-20 alkoxyalkyl, HO-protecting group (when m = 1); R2 = HO-protecting group; A1 - A3 = 2,5-pyridinediyl, 2,5-pyrimidinediyl, 2,5-pyrazinediyl, 3,6-pyridazinediyl, Q - Q5; wherein i = 0-4; j, k = 0-3; p, q = 0,1; when A1 represents a condensed ring, p + q = 0 or 1 and A2 and A3 represent a single ring; when A1 represents a single ring, p + q = 1 or 2; when p + q = 2, both A2 and A3 represent a single ring; Z = H, F; n = 0-10; m, r = 0, 1], useful as intermediates for agrochems., drugs, and organic electronic materials, particularly ferroelec. liquid crystals, are prepared by coupling of R1-(O)m-A1-(A2)p-(A3)q-X [X = halo, OSO2R; where R = lower alkyl optionally substituted by F, (un)substituted Ph; R1, A1 - A3, m, p, q = same as above] with acetylene derivative HC.tplbond.C(CH2)n(CHCZ3)rOR2 (n, Z, r, R2 = same as above) in the presence of a metal catalyst and a base and catalytic hydrogenation of the resulting acetylenephenol derivative R1-(O)m-A1-(A2)p-(A3)qC.tplbond.C(CH2)n(CHCZ3)rOR2. Thus, a mixture of 2-(4-bromophenyl)-5-

acetoxypyrimidine, optically active 6-(2-tetrahydropyranyloxy)-1-heptyne, (Ph3P)2PdCl2, CuI, Ph3P, and Et3N was allowed to react at 60-65° under N for 13 h to give 87% optically active (-)-5-acetoxy-2-[4-[6-(2-tetrahydropyranyloxy)-1-heptynyl]phenyl]pyrimidine, which was hydrogenated over 5% Pd-C in EtOAc/MeOH to give 98.5% (-)-5-acetoxy-2-[4-[6-(2-tetrahydropyranyloxy)-1-heptyl]phenyl]pyrimidine. The latter compound was saponified with 20% aqueous NaOH in THF/MeOH at 40-50° for 7 h to give, after acidification with 10% aqueous H2SO4, 97.5% (-)-5-hydroxy-2-[4-[6-(2-tetrahydropyranyloxy)-1-heptyl]phenyl]pyrimidine.

IT 170144-77-1P

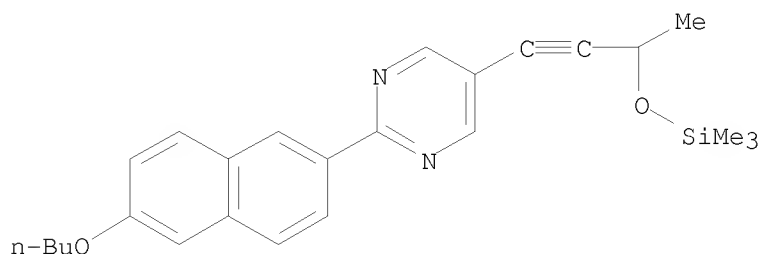
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and catalytic hydrogenation in preparation of (heterocycle-containing) phenol derivs., and related compds.)

RN 170144-77-1 HCAPLUS

CN Pyrimidine, 2-(6-butoxy-2-naphthalenyl)-5-[3-[(trimethylsilyl)oxy]-1-butyryl]-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



L29 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1995:784832 HCAPLUS

DN 123:183660

TI Trans-olefin compounds, method for production thereof, liquid crystal composition containing the same as active ingredient, and liquid crystal element using said composition.

IN Fujimoto, Yukari; Takano, Naoyuki; Higashii, Takayuki; Minai, Masayoshi; Sekine, Chizu; Ueda, Kayoko; Fujisawa, Koichi; Endo, Kyoko; Tani, Takeshi

PA Sumitomo Chemical Co., Ltd., Japan

SO Eur. Pat. Appl., 128 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP----643119	A1	19950315	1994EP-0305719	19940802 <--
	EP----643119	B1	20000426		
	R: CH, DE, FR, GB, IT, LI, NL				
	JP--07304696	A	19951121	1994JP-0186751	19940715 <--
	US---5707547	A	19980113	1994US-0282024	19940729 <--
	US---6030546	A	20000229	1997US-0832972	19970404 <--
PRAI	1993JP-0192381	A	19930803	<--	
	1993JP-0351210	A	19931227	<--	
	1994JP-0006015	A	19940124	<--	
	1994JP-0036832	A	19940308	<--	
	1994JP-0066723	A	19940309	<--	
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OS MARPAT 123:183660

AB The trans-olefin compds. are described represented by the general formula  $R_1-(O)_m-A_1-(A_2)_p-(A_3)_q-CH:CH-(CH_2)_n-(CHZ(CZ_3))_r-(O)_s-(CO)_t-R_2$  [ $R_1$  = alkyl, alkoxyalkyl, H, provided that when  $m = 1$ ,  $R_1$  may be a protecting group for hydroxyl group and when  $r = 0$ ,  $s = 0$  and  $t = 0$ ,  $R_1$  cannot be an unsatd. alkyl group;  $R_2$  = H, alkyl or alkoxyalkyl which may optionally be substituted by halogen atom, provided that when  $s = 1$  and  $t = 0$ ,  $R_2$  may be a protecting group for hydroxyl group;  $A_1$ ,  $A_2$  and  $A_3$  = optionally F-substituted 1,4-phenylene, pyridine-diyl, pyrimidine-2,5-diyl, pyridazine-2,5-diyl, pyrazine-2,5-diyl, or naphthalene-2,6-diyl, quinazoline-2,6-diyl, quinoxaline-2,6-diyl, quinoline-2,6-diyl, isoquinoline-2,6-diyl each of which may have 0-4 F substituents in the benzene ring; Z denotes optically active site]. The above compds. are useful as an ingredient of liquid crystal composition or an intermediate of pesticides or medical drugs. Liquid crystal materials and the like, a process for producing those trans-olefin compds., a liquid crystal composition containing the trans-olefin compound as an active ingredient, and a liquid crystal

element using the liquid crystal composition are also described.

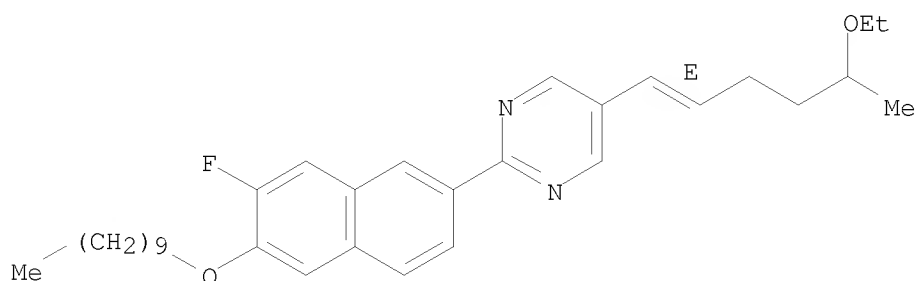
IT 167544-26-5P

RL: DEV (Device component use); MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (liquid crystal ingredient)

RN 167544-26-5 HCAPLUS

CN Pyrimidine, 2-[6-(decyloxy)-7-fluoro-2-naphthalenyl]-5-(5-ethoxy-1-hexenyl)-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L29 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1993:682802 HCAPLUS

DN 119:282802

TI Palladium-catalyzed cross-coupling reactions in the synthesis of some high polarizability materials

AU Hird, Michael; Toyne, Kenneth J.

CS Sch. Chem., Univ. Hull, Hull, HU6 7RX, UK

SO Liquid Crystals (1993), 14(3), 741-61

CODEN: LICRE6; ISSN: 0267-8292

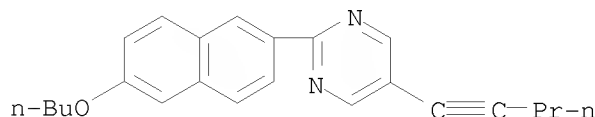
DT Journal

LA English

AB Liquid crystal materials of high optical anisotropy consist of moieties of high electron d. in conjugation with each other along the mol. length. Such structures are conducive to convergent synthesis methods. Here the authors report the synthesis of a range of novel materials by the strategic use of Pd-catalyzed cross-coupling methods. In addition to the traditional use of bromide and iodide leaving groups, invaluable use of the triflate leaving group and the importance of selective cross-coupling methods using both arylboronic acids and alkynylzinc chloride derivs. is illustrated. This systematic methodol. allows the sep. synthesis of the

appropriate sub-units that can be efficiently coupled together to provide high overall product yields.

IT 145369-12-6P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and liquid crystal properties of)  
 RN 145369-12-6 HCAPLUS  
 CN Pyrimidine, 2-(6-butoxy-2-naphthalenyl)-5-(1-pentynyl)- (9CI) (CA INDEX NAME)



L29 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1993:59433 HCAPLUS

DN 118:59433

TI Preparation of (hetero)arylnaphthalenes as liquid crystals

IN Toyne, Kenneth Johnson; Goodby, John William; Seed, Alexander; Gray, George William; McDonnell, Damien Gerard; Raynes, Edward Peter; Day, Sally Elizabeth; Harrison, Kenneth John; Hird, Michael

PA United Kingdom Secretary for Defence, UK

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PI	WO---9216500	A1	19921001	1992WO-GB00411	19920309 <--
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	CA---2082798	A1	19920914	1992CA-2082798	19920309 <--
	EP---531475	A1	19930317	1992EP-0906378	19920309 <--
	EP---531475	B1	20020828		
	R: AT, BE, CH, DE, DK, FR, GB, IT, LI, LU, MC, NL, SE				
	JP--05507724	T	19931104	1992JP-0505576	19920309 <--
	JP---3414732	B2	20030609		
	JP2002145844	A	20020522	2001JP-0251102	19920309 <--
	US---5496500	A	19960305	1994US-0283714	19940801 <--
	US---5820781	A	19981013	1995US-0470153	19950606 <--
	US---6291034	B1	20010918	1998US-0150737	19980910 <--
	US2002011588	A1	20020131	2001US-0919908	20010802 <--
PRAI	1991GB-0005359	A	19910313	<--	
	1992JP-0505576	A3	19920309	<--	
	1992WO-GB00411	W	19920309	<--	
	1993US-0002396	B1	19930113	<--	
	1994US-0283714	A3	19940801	<--	
	1995US-0470153	A3	19950606	<--	
	1995US-0243714	B3	19950710	<--	
	1998US-0150737	A3	19980910	<--	

OS MARPAT 118:59433

AB R1A(X)m(B)nR2 [I; A = naphthylene, brominated naphthylene, fluorinated naphthylene; B = (substituted) phenylene, thiophenylene, pyrimidinylene, pyridinylene; R1, R2 = alkyl, alkoxy, alkynyl, thioalkyl, Br, cyano, thiocyanato, isothiocyanato, perfluoroalkyl, perfluoroalkoxy, H; X = C.tplbond.C, CO2, C:C; m = 0, 1; n = 0,1 when m = 1; n = 0 when m = 0; with provisos] were prepared as liquid crystals. Thus, 2-bromo-6-butylthionaphthalene (preparation given) was treated with tri-Me borate and

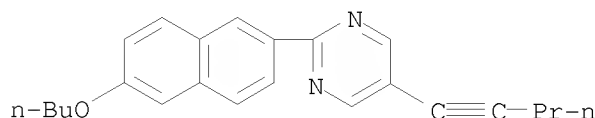
BuLi in hexane to give the boronic acid. This was coupled with 4-bromobenzonitrile in the presence of (Ph<sub>3</sub>P)<sub>4</sub>Pd to give 2-(4-cyanophenyl)-6-butylthionaphthalene in 81% yield. The latter had crystalline to nematic liquid crystal phase transition temperature of 92°.

IT 145369-12-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as liquid crystal)

RN 145369-12-6 HCAPLUS

CN Pyrimidine, 2-(6-butoxy-2-naphthalenyl)-5-(1-pentynyl)- (9CI) (CA INDEX NAME)



L29 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 1989:135258 HCAPLUS

DN 110:135258

TI Preparation of (2,6-disubstituted-5-cyano-4-pyrimidinyl)oxy)acetic acid as aldose reductase inhibitors

IN Bagli, Jehan F.; Ellingboe, John W.; Alessi, Thomas R.

PA American Home Products Corp., USA

SO U.S., 9 pp.

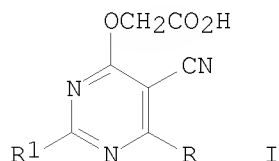
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

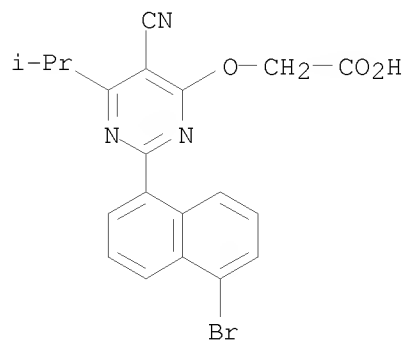
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	US---4906753	A	19900306	1988US-0221586	19880720 <--
PRAI	1987US-0062734	A3	19870612	<--	
OS	CASREACT 110:135258; MARPAT 110:135258				
GI					



AB The title compds. [I; R<sub>1</sub> = C<sub>1</sub>-6 alkyl, C<sub>3</sub>-6 cycloalkyl, (halo-substituted) Ph, phenylmethyl, (halo-substituted) naphthalenyl, thienyl; R = SR<sub>2</sub> (wherein R<sub>2</sub> = C<sub>1</sub>-6 alkyl, C<sub>4</sub>-7 cycloalkylmethyl, phenylmethyl optionally substituted by halo), C<sub>1</sub>-4 alkyl, Ph, 1-naphthalenylmethyl], useful as aldose reductase inhibitors, were prepared To a cooled (0°), stirred suspension of NaH in DMF was added a solution of 0.025 mol Me<sub>3</sub>CC(:NH)OMe.HCl (prepared from Me<sub>3</sub>CCN, AcCl, and MeOH). The mixture was stirred at room temperature for 1 h and then cooled to 0°. A solution of 0.022 mol 3.3-bis(cyclohexylmethylthio)-2-cyano-2-propenoate [prepared from (KS)2C:C(CN)CO<sub>2</sub>Me and (bromomethyl)cyclohexane was added dropwise. The resulting mixture was stirred 1 h at room temperature overnight to give 71% 4-[(cyclohexylmethyl)thio]-1,6-dihydro-2-(1,1-dimethylethyl)-6-oxo-5-

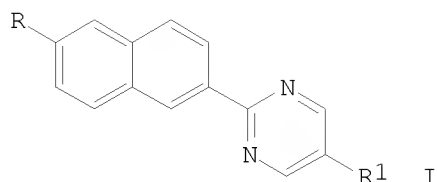
pyrimidinecarbonitrile which was alkylated by BrCH<sub>2</sub>CO<sub>2</sub>CMe<sub>3</sub> in DMF containing NaH to give 92% tert-Bu [[5-cyano-6-[(cyclohexylmethyl)thio]-2-(tert-butyl)-4-pyrimidinyl]oxy]acetate. Treatment of the latter with CF<sub>3</sub>CO<sub>2</sub>H gave 40% I [R = (cyclohexylmethyl)thio, R<sub>1</sub> = Me<sub>3</sub>C] (II) which at 10<sup>-5</sup>M inhibited 97% aldose reductase in vitro.

IT 119491-90-6P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as aldose reductase inhibitor)  
 RN 119491-90-6 HCAPLUS  
 CN Acetic acid, [[2-(5-bromo-1-naphthalenyl)-5-cyano-6-(1-methylethyl)-4-pyrimidinyl]oxy]- (9CI) (CA INDEX NAME)

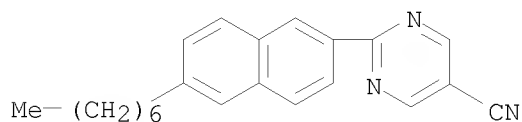


L29 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1986:99627 HCAPLUS  
 DN 104:99627  
 OREF 104:15617a,15620a  
 TI 2-Substituted-6-(5-substituted-2-pyrimidinyl)naphthalenes and liquid crystal compositions containing them  
 IN Sugimori, Shigeru; Isoyama, Toyoshiro; Goto, Yasuyuki; Ogawa, Tetsuya  
 PA Chisso Corp. , Japan  
 SO Eur. Pat. Appl., 16 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

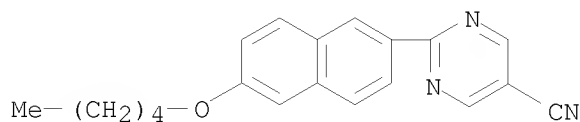
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	EP----151294	B1	19880622		
	R: CH, DE, GB, LI				
	JP--60146877	A	19850802	1984JP-0003122	19840111 <--
	JP--04028265	B	19920513		
	US--4585575	A	19860429	1984US-0683162	19841218 <--
PRAI	1984JP-0003122	A	19840111	<--	
OS	MARPAT 104:99627				
GI					



AB A liquid crystal composition for display devices contains  $\geq 1$   
 pyrimidinyl naphthalene compound I (R = C1-10 alkyl, alkoxy; R1 = CN, C1-10  
 alkyl). The composition exhibits increased optical anisotropy ( $\Delta n$ ) and  
 reduces driving voltage of the display device. Thus, a display cell  
 (distance between electrodes 10  $\mu\text{m}$ ) was filled with a composition containing  
 85 weight% of a mixture of trans-4-propyl-(4-cyanophenyl)cyclohexane 24,  
 trans-4-pentyl-(4-cyanophenyl)cyclohexane 36, trans-4-heptyl-(4-  
 cyanophenyl)cyclohexane 25, 4-(trans-4-pentyl)cyclohexyl-4'-cyanobiphenyl  
 15 weight% and 15 weight% of I (R = C7H15; R1 = C6H13) (prepared by reacting  
 6-heptyl-2-naphthalenecarboxamide hydrochloride with  
 $\alpha$ -hexyl- $\beta$ -dimethylaminoacrolein). The above liquid crystal  
 composition had a dielec. anisotropy value of 11, a nematic-isotropic phase  
 transition point at 72.2°, and  $\Delta n$  0.146 (vs.  $\Delta n$  0.14  
 for a I-free control). The display cell using the above composition had a  
 threshold voltage ( $V_{th}$ ) and saturation voltage ( $V_s$ ) of 1.58 and 2.17 V resp.,  
 vs. 1.75 and 2.4 V for a I-free control.  
 IT 100497-23-2P 100497-24-3P  
 RL: PREP (Preparation)  
 (preparation and properties of liquid-crystal compound, for display devices)  
 RN 100497-23-2 HCAPLUS  
 CN 5-Pyrimidinecarbonitrile, 2-(6-heptyl-2-naphthalenyl)- (CA INDEX NAME)



RN 100497-24-3 HCAPLUS  
 CN 5-Pyrimidinecarbonitrile, 2-[6-(pentyloxy)-2-naphthalenyl]- (CA INDEX  
 NAME)



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(FILE 'HCAPLUS' ENTERED AT 16:25:49 ON 11 FEB 2008)  
 DEL HIS Y

L1 1 US20020072521 /PN

FILE 'REGISTRY' ENTERED AT 17:51:22 ON 11 FEB 2008

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FILE 'HCAPLUS' ENTERED AT 17:51:22 ON 11 FEB 2008
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FILE 'REGISTRY' ENTERED AT 17:51:22 ON 11 FEB 2008
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L7      STR L5
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L21     1632 L19 FULL SUB=L15

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FILE 'REGISTRY' ENTERED AT 18:20:30 ON 11 FEB 2008
L27     0 L26 AND L3

FILE 'HCAPLUS' ENTERED AT 18:20:45 ON 11 FEB 2008
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